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10/723,275	11/25/2003	Shinya Yamamura	FUJH 20.761	8746

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EXAMINER	
PATEL, HARESH N	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,275	YAMAMURA ET AL.	
	Examiner	Art Unit	
	Haresh N. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/25/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-18 are subject to examination.

Priority

2. Applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) or (f), is acknowledged.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The present title is too broad and not sufficient for proper classification of the claimed subject matter.

Drawings

4. The figures submitted on the filing date of this application are acknowledged.

Information Disclosure Statement

5. An initialed and dated copy of the applicant's IDS form 1449, is attached to the instant Office action, please see attachments section of the attached form PTO-326 containing paper dates.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 9 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter. The claims 9 and 10 claim a program that is not tangibly embodied in a computer storage medium such as memory, etc.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Following claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations, "for substituting for". These limitations are indefinite for failing to particularly point out and distinctly claim the subject matter in the claim.

Claim 4 recites the limitations, "its". These limitations are indefinite for failing to particularly point out and distinctly claim the subject matter in the claim.

Claims 6, 18 recite the limitations, "it". These limitations are indefinite for failing to particularly point out and distinctly claim the subject matter in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Quigley et al. 2002/0159442 (Hereinafter Quigley).

10. Referring to claim 1, Quigley discloses a proxy network control apparatus for substituting for service equipment providing predetermined services to user terminal (e.g., page 1), and executing functions complementing or expanding the functions of the service equipment (e.g., page 1), comprising: a packet monitoring unit for monitoring packets interchanged between the user terminal and the service equipment (e.g., page 2); and an execution unit for determining and executing the functions complementing or expanding, based on packets monitored by the packet monitoring unit (e.g., page 2).

11. Referring to claim 2, Quigley discloses the claimed limitations as rejected above. Quigley also discloses a proxy network control apparatus for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal and the service equipment arranged between the user terminal and the service equipment providing predetermined services to the user terminal (e.g., page 2), comprising: a packet monitoring unit for monitoring packets interchanged

between the user terminal and the service equipment; a service control unit for determining the functions complementing or expanding based on the packets monitored by the packet monitoring unit (e.g., page 2); and an external equipment control unit for controlling the network equipment based on the functions determined by the service control unit (e.g., page 2).

12. Referring to claim 3, Quigley discloses the claimed limitations as rejected above. Quigley also discloses the service equipment is a DHCP server, wherein the packet monitoring unit monitors packets containing addresses issued from the service equipment to the user terminal (e.g., page 2), wherein the service control unit determines an access regulation function for allowing the packets having addresses issued by the service equipment as the source addresses to pass and not allowing the packets having other addresses as the source addresses to pass, based on the packets monitored by the packet monitoring unit (e.g., page 2), and wherein the external equipment control unit controls the network equipment so as to execute the access regulation function (e.g., page 2).

13. Referring to claim 4, Quigley discloses the claimed limitations as rejected above. Quigley also discloses the user terminal is a mobile communication terminal having a home address of its home network (e.g., page 3), wherein the network equipment is a firewall which allows packets having predetermined source addresses to pass and which does not allow other packets to pass among packets transmitted from an external network of the home network to the exterior (e.g., page 3), wherein the packet monitoring unit monitors packets containing the home address of the user terminal, interchanged between

the user terminal having moved into the external network and a home agent of the home network (e.g., page 3), wherein the service control unit determines a function for releasing access regulation such that the packets having the home address are passed, based on the packets monitored by the packet monitoring unit, and wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., page 3).

14. Referring to claim 5, Quigley discloses the claimed limitations as rejected above. Quigley also discloses the user terminal is an. IPv6 terminal (e.g., page 4), wherein the service equipment is an authentication server for executing authentication of a created IP address of the user terminal (e.g., page 4), wherein the packet monitoring unit monitors packets containing IP addresses authenticated by the service equipment, wherein the service control unit determines a function for releasing access regulation such that the packets having the IP addresses as the source addresses are passed, based on the packets monitored by the packet monitoring unit (e.g., page 4), wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., page 4).

15. Referring to claim 6, Quigley discloses the claimed limitations as rejected above. Quigley also discloses an address transmission unit for creating an IP address of the user terminal and transmitting it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., page 4).

16. Referring to claim 7, Quigley discloses the claimed limitations as rejected above. Quigley also discloses wherein the functions determined by the service control unit include a function for recording predetermined information (e.g., page 4).

17. Referring to claim 8, Quigley discloses the claimed limitations as rejected above. Quigley also discloses wherein the functions determined by the service control unit include a function for transmitting messages to a predetermined network equipment or the service equipment (e.g., page 4).

18. Referring to claim 9, Quigley discloses the claimed limitations as rejected above. Quigley also discloses a program for causing a computer to execute the steps of: monitoring packets interchanged between a user terminal and service equipment providing predetermined services to the user terminal (e.g., page 2); and determining and executing functions for complementing or expanding the functions of the service equipment based on the monitored packets, in lieu of the service equipment (e.g., page 3).

19. Referring to claim 10, Quigley discloses the claimed limitations as rejected above. Quigley also discloses a program for causing a computer for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal (e.g., page 1), and the service equipment, arranged between the user terminal and the service equipment providing predetermined services to the user terminal, to execute the steps of: monitoring packets interchanged between the user

terminal and the service equipment (e.g., page 2); determining the functions for complementing or expanding based on the monitored packets and controlling the network equipment based on the determined functions (e.g., page 2).

20. Referring to claim 11, Quigley discloses the claimed limitations as rejected above. Quigley also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., page 2); and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment and executing functions complementing or expanding the functions of the service equipment based on the packets meeting predetermined conditions (e.g., page 3).

21. Referring to claim 12, Quigley discloses the claimed limitations as rejected above. Quigley also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., page 3).

22. Referring to claim 13, Quigley discloses the claimed limitations as rejected above. Quigley also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., page 4); network equipment arranged between the user terminal and the service equipment (e.g., page 4), for transferring packets interchanged between the user terminal and the service equipment; and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment

and for executing functions complementing or expanding the functions of the service equipment as a substitute for the service equipment by controlling the network equipment based on the packets meeting predetermined conditions (e.g., page 4).

23. Referring to claim 14, Quigley discloses the claimed limitations as rejected above. Quigley also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., page 1).

24. Referring to claim 15, Quigley discloses the claimed limitations as rejected above. Quigley also discloses wherein the service equipment is a DHCP server (e.g., page 4), wherein the proxy network control apparatus monitors packets containing an address distributed to the user terminal from the service equipment and controls the network equipment so as to allow the packets transmitted from the user terminal and having the address as the source address to pass and so as not to allow other packets to pass (e.g., page 4).

25. Referring to claim 16, Quigley discloses the claimed limitations as rejected above. Quigley also discloses the user terminal is a mobile communication terminal having a home address of a home network (e.g., page 4), wherein the network equipment is network equipment allowing the packets having a predetermined source address to pass and not allowing other packets to pass among the packets transmitted from an external network of the home network to the exterior (e.g., page 4), and wherein the proxy network control apparatus controls the -network equipment so as to pass the packets

containing the home address of the user terminal as the source address, based on the packets containing the home address of the user terminal interchanged between the user terminal moved into the external network and a home agent of the home network (e.g., page 4).

26. Referring to claim 17, Quigley discloses the claimed limitations as rejected above. Quigley also discloses the user terminal is an IPv6 terminal (e.g., page 4), wherein the service equipment is an authentication server for authenticating created IP address of the user terminal (e.g., page 4), wherein the proxy network unit controls the network equipment so as to allow the packets having the IP address authenticated by the service equipment as the source address to pass (e.g., page 4).

27. Referring to claim 18, Quigley discloses the claimed limitations as rejected above. Quigley also discloses wherein the proxy network control apparatus further executes a function for creating the IP address of the user terminal and sending it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., page 4).

28. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Paul et al. 2002/0161868 (Hereinafter Paul).

29. Referring to claim 1, Paul discloses a proxy network control apparatus for substituting for service equipment providing predetermined services to user terminal (e.g., page 3), and executing functions complementing or expanding the functions of the

service equipment (e.g., page 3), comprising: a packet monitoring unit for monitoring packets interchanged between the user terminal and the service equipment (e.g., page 4); and an execution unit for determining and executing the functions complementing or expanding, based on packets monitored by the packet monitoring unit (e.g., page 4).

30. Referring to claim 2, Paul discloses the claimed limitations as rejected above. Paul also discloses a proxy network control apparatus for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal and the service equipment arranged between the user terminal and the service equipment providing predetermined services to the user terminal (e.g., page 4), comprising: a packet monitoring unit for monitoring packets interchanged between the user terminal and the service equipment; a service control unit for determining the functions complementing or expanding based on the packets monitored by the packet monitoring unit (e.g., page 4); and an external equipment control unit for controlling the network equipment based on the functions determined by the service control unit (e.g., page 4).

31. Referring to claim 3, Paul discloses the claimed limitations as rejected above. Paul also discloses the service equipment is a DHCP server, wherein the packet monitoring unit monitors packets containing addresses issued from the service equipment to the user terminal (e.g., page 4), wherein the service control unit determines an access regulation function for allowing the packets having addresses issued by the service

equipment as the source addresses to pass and not allowing the packets having other addresses as the source addresses to pass, based on the packets monitored by the packet monitoring unit (e.g., page 4), and wherein the external equipment control unit controls the network equipment so as to execute the access regulation function (e.g., page 4).

32. Referring to claim 4, Paul discloses the claimed limitations as rejected above. Paul also discloses the user terminal is a mobile communication terminal having a home address of its home network (e.g., page 5), wherein the network equipment is a firewall which allows packets having predetermined source addresses to pass and which does not allow other packets to pass among packets transmitted from an external network of the home network to the exterior (e.g., page 5), wherein the packet monitoring unit monitors packets containing the home address of the user terminal, interchanged between the user terminal having moved into the external network and a home agent of the home network (e.g., page 5), wherein the service control unit determines a function for releasing access regulation such that the packets having the home address are passed, based on the packets monitored by the packet monitoring unit, and wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., page 5).

33. Referring to claim 5, Paul discloses the claimed limitations as rejected above. Paul also discloses the user terminal is an. IPv6 terminal (e.g., page 6), wherein the service equipment is an authentication server for executing authentication of a created IP address of the user terminal (e.g., page 6), wherein the packet monitoring unit monitors

packets containing IP addresses authenticated by the service equipment, wherein the service control unit determines a function for releasing access regulation such that the packets having the IP addresses as the source addresses are passed, based on the packets monitored by the packet monitoring unit (e.g., page 6), wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., page 6).

34. Referring to claim 6, Paul discloses the claimed limitations as rejected above. Paul also discloses an address transmission unit for creating an IP address of the user terminal and transmitting it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., page 6).

35. Referring to claim 7, Paul discloses the claimed limitations as rejected above. Paul also discloses wherein the functions determined by the service control unit include a function for recording predetermined information (e.g., page 6).

36. Referring to claim 8, Paul discloses the claimed limitations as rejected above. Paul also discloses wherein the functions determined by the service control unit include a function for transmitting messages to a predetermined network equipment or the service equipment (e.g., page 6).

37. Referring to claim 9, Paul discloses the claimed limitations as rejected above. Paul also discloses a program for causing a computer to execute the steps of: monitoring

packets interchanged between a user terminal and service equipment providing predetermined services to the user terminal (e.g., page 4); and determining and executing functions for complementing or expanding the functions of the service equipment based on the monitored packets, in lieu of the service equipment (e.g., page 5).

38. Referring to claim 10, Paul discloses the claimed limitations as rejected above. Paul also discloses a program for causing a computer for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal (e.g., page 3), and the service equipment, arranged between the user terminal and the service equipment providing predetermined services to the user terminal, to execute the steps of: monitoring packets interchanged between the user terminal and the service equipment (e.g., page 4); determining the functions for complementing or expanding based on the monitored packets and controlling the network equipment based on the determined functions (e.g., page 4).

39. Referring to claim 11, Paul discloses the claimed limitations as rejected above. Paul also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., page 4); and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment and executing functions complementing or expanding the functions of the service equipment based on the packets meeting predetermined conditions (e.g., page 5).

40. Referring to claim 12, Paul discloses the claimed limitations as rejected above. Paul also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., page 5).

41. Referring to claim 13, Paul discloses the claimed limitations as rejected above. Paul also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., page 6); network equipment arranged between the user terminal and the service equipment (e.g., page 6), for transferring packets interchanged between the user terminal and the service equipment; and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment and for executing functions complementing or expanding the functions of the service equipment as a substitute for the service equipment by controlling the network equipment based on the packets meeting predetermined conditions (e.g., page 6).

42. Referring to claim 14, Paul discloses the claimed limitations as rejected above. Paul also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., page 3).

43. Referring to claim 15, Paul discloses the claimed limitations as rejected above. Paul also discloses wherein the service equipment is a DHCP server (e.g., page 6), wherein the proxy network control apparatus monitors packets containing an address

distributed to the user terminal from the service equipment and controls the network equipment so as to allow the packets transmitted from the user terminal and having the address as the source address to pass and so as not to allow other packets to pass (e.g., page 6).

44. Referring to claim 16, Paul discloses the claimed limitations as rejected above. Paul also discloses the user terminal is a mobile communication terminal having a home address of a home network (e.g., page 6), wherein the network equipment is network equipment allowing the packets having a predetermined source address to pass and not allowing other packets to pass among the packets transmitted from an external network of the home network to the exterior (e.g., page 6), and wherein the proxy network control apparatus controls the -network equipment so as to pass the packets containing the home address of the user terminal as the source address, based on the packets containing the home address of the user terminal interchanged between the user terminal moved into the external network and a home agent of the home network (e.g., page 6).

45. Referring to claim 17, Paul discloses the claimed limitations as rejected above. Paul also discloses the user terminal is an IPv6 terminal (e.g., page 6), wherein the service equipment is an authentication server for authenticating created IP address of the user terminal (e.g., page 6), wherein the proxy network unit controls the network equipment so as to allow the packets having the IP address authenticated by the service equipment as the source address to pass (e.g., page 6).

46. Referring to claim 18, Paul discloses the claimed limitations as rejected above. Paul also discloses wherein the proxy network control apparatus further executes a function for creating the IP address of the user terminal and sending it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., page 6).

47. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Young et al. 7,274,684 (Hereinafter Young).

48. Referring to claim 1, Young discloses a proxy network control apparatus for substituting for service equipment providing predetermined services to user terminal (e.g., col., 3), and executing functions complementing or expanding the functions of the service equipment (e.g., col., 3), comprising: a packet monitoring unit for monitoring packets interchanged between the user terminal and the service equipment (e.g., col., 4); and an execution unit for determining and executing the functions complementing or expanding, based on packets monitored by the packet monitoring unit (e.g., col., 4).

49. Referring to claim 2, Young discloses the claimed limitations as rejected above. Young also discloses a proxy network control apparatus for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal and the service equipment arranged between the user terminal and the service equipment providing predetermined services to the user terminal (e.g., col., 4), comprising: a packet monitoring unit for monitoring packets interchanged

between the user terminal and the service equipment; a service control unit for determining the functions complementing or expanding based on the packets monitored by the packet monitoring unit (e.g., col., 4); and an external equipment control unit for controlling the network equipment based on the functions determined by the service control unit (e.g., col., 4).

50. Referring to claim 3, Young discloses the claimed limitations as rejected above. Young also discloses the service equipment is a DHCP server, wherein the packet monitoring unit monitors packets containing addresses issued from the service equipment to the user terminal (e.g., col., 4), wherein the service control unit determines an access regulation function for allowing the packets having addresses issued by the service equipment as the source addresses to pass and not allowing the packets having other addresses as the source addresses to pass, based on the packets monitored by the packet monitoring unit (e.g., col., 4), and wherein the external equipment control unit controls the network equipment so as to execute the access regulation function (e.g., col., 4).

51. Referring to claim 4, Young discloses the claimed limitations as rejected above. Young also discloses the user terminal is a mobile communication terminal having a home address of its home network (e.g., col., 5), wherein the network equipment is a firewall which allows packets having predetermined source addresses to pass and which does not allow other packets to pass among packets transmitted from an external network of the home network to the exterior (e.g., col., 5), wherein the packet monitoring unit monitors packets containing the home address of the user terminal, interchanged between

the user terminal having moved into the external network and a home agent of the home network (e.g., col., 5), wherein the service control unit determines a function for releasing access regulation such that the packets having the home address are passed, based on the packets monitored by the packet monitoring unit, and wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., col., 5).

52. Referring to claim 5, Young discloses the claimed limitations as rejected above. Young also discloses the user terminal is an. IPv6 terminal (e.g., col., 6), wherein the service equipment is an authentication server for executing authentication of a created IP address of the user terminal (e.g., col., 6), wherein the packet monitoring unit monitors packets containing IP addresses authenticated by the service equipment, wherein the service control unit determines a function for releasing access regulation such that the packets having the IP addresses as the source addresses are passed, based on the packets monitored by the packet monitoring unit (e.g., col., 6), wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., col., 6).

53. Referring to claim 6, Young discloses the claimed limitations as rejected above. Young also discloses an address transmission unit for creating an IP address of the user terminal and transmitting it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., col., 6).

54. Referring to claim 7, Young discloses the claimed limitations as rejected above. Young also discloses wherein the functions determined by the service control unit include a function for recording predetermined information (e.g., col., 6).

55. Referring to claim 8, Young discloses the claimed limitations as rejected above. Young also discloses wherein the functions determined by the service control unit include a function for transmitting messages to a predetermined network equipment or the service equipment (e.g., col., 6).

56. Referring to claim 9, Young discloses the claimed limitations as rejected above. Young also discloses a program for causing a computer to execute the steps of: monitoring packets interchanged between a user terminal and service equipment providing predetermined services to the user terminal (e.g., col., 4); and determining and executing functions for complementing or expanding the functions of the service equipment based on the monitored packets, in lieu of the service equipment (e.g., col., 5).

57. Referring to claim 10, Young discloses the claimed limitations as rejected above. Young also discloses a program for causing a computer for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal (e.g., col., 3), and the service equipment, arranged between the user terminal and the service equipment providing predetermined services to the user terminal, to execute the steps of: monitoring packets interchanged between the user

terminal and the service equipment (e.g., col., 4); determining the functions for complementing or expanding based on the monitored packets and controlling the network equipment based on the determined functions (e.g., col., 4).

58. Referring to claim 11, Young discloses the claimed limitations as rejected above. Young also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., col., 4); and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment and executing functions complementing or expanding the functions of the service equipment based on the packets meeting predetermined conditions (e.g., col., 5).

59. Referring to claim 12, Young discloses the claimed limitations as rejected above. Young also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., col., 5).

60. Referring to claim 13, Young discloses the claimed limitations as rejected above. Young also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., col., 6); network equipment arranged between the user terminal and the service equipment (e.g., col., 6), for transferring packets interchanged between the user terminal and the service equipment; and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment

and for executing functions complementing or expanding the functions of the service equipment as a substitute for the service equipment by controlling the network equipment based on the packets meeting predetermined conditions (e.g., col., 6).

61. Referring to claim 14, Young discloses the claimed limitations as rejected above. Young also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., col., 3).

62. Referring to claim 15, Young discloses the claimed limitations as rejected above. Young also discloses wherein the service equipment is a DHCP server (e.g., col., 6), wherein the proxy network control apparatus monitors packets containing an address distributed to the user terminal from the service equipment and controls the network equipment so as to allow the packets transmitted from the user terminal and having the address as the source address to pass and so as not to allow other packets to pass (e.g., col., 6).

63. Referring to claim 16, Young discloses the claimed limitations as rejected above. Young also discloses the user terminal is a mobile communication terminal having a home address of a home network (e.g., col., 6), wherein the network equipment is network equipment allowing the packets having a predetermined source address to pass and not allowing other packets to pass among the packets transmitted from an external network of the home network to the exterior (e.g., col., 6), and wherein the proxy network control apparatus controls the -network equipment so as to pass the packets

containing the home address of the user terminal as the source address, based on the packets containing the home address of the user terminal interchanged between the user terminal moved into the external network and a home agent of the home network (e.g., col., 6).

64. Referring to claim 17, Young discloses the claimed limitations as rejected above. Young also discloses the user terminal is an IPv6 terminal (e.g., col., 6), wherein the service equipment is an authentication server for authenticating created IP address of the user terminal (e.g., col., 6), wherein the proxy network unit controls the network equipment so as to allow the packets having the IP address authenticated by the service equipment as the source address to pass (e.g., col., 6).

65. Referring to claim 18, Young discloses the claimed limitations as rejected above. Young also discloses wherein the proxy network control apparatus further executes a function for creating the IP address of the user terminal and sending it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., col., 6).

66. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Mao 2004/0243710 (Hereinafter Mao).

67. Referring to claim 1, Mao discloses a proxy network control apparatus for substituting for service equipment providing predetermined services to user terminal

(e.g., page 3), and executing functions complementing or expanding the functions of the service equipment (e.g., page 3), comprising: a packet monitoring unit for monitoring packets interchanged between the user terminal and the service equipment (e.g., page 4); and an execution unit for determining and executing the functions complementing or expanding, based on packets monitored by the packet monitoring unit (e.g., page 4).

68. Referring to claim 2, Mao discloses the claimed limitations as rejected above. Mao also discloses a proxy network control apparatus for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal and the service equipment arranged between the user terminal and the service equipment providing predetermined services to the user terminal (e.g., page 4), comprising: a packet monitoring unit for monitoring packets interchanged between the user terminal and the service equipment; a service control unit for determining the functions complementing or expanding based on the packets monitored by the packet monitoring unit (e.g., page 4); and an external equipment control unit for controlling the network equipment based on the functions determined by the service control unit (e.g., page 4).

69. Referring to claim 3, Mao discloses the claimed limitations as rejected above. Mao also discloses the service equipment is a DHCP server, wherein the packet monitoring unit monitors packets containing addresses issued from the service equipment to the user terminal (e.g., page 4), wherein the service control unit determines an access

regulation function for allowing the packets having addresses issued by the service equipment as the source addresses to pass and not allowing the packets having other addresses as the source addresses to pass, based on the packets monitored by the packet monitoring unit (e.g., page 4), and wherein the external equipment control unit controls the network equipment so as to execute the access regulation function (e.g., page 4).

70. Referring to claim 4, Mao discloses the claimed limitations as rejected above. Mao also discloses the user terminal is a mobile communication terminal having a home address of its home network (e.g., page 5), wherein the network equipment is a firewall which allows packets having predetermined source addresses to pass and which does not allow other packets to pass among packets transmitted from an external network of the home network to the exterior (e.g., page 5), wherein the packet monitoring unit monitors packets containing the home address of the user terminal, interchanged between the user terminal having moved into the external network and a home agent of the home network (e.g., page 5), wherein the service control unit determines a function for releasing access regulation such that the packets having the home address are passed, based on the packets monitored by the packet monitoring unit, and wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., page 5).

71. Referring to claim 5, Mao discloses the claimed limitations as rejected above. Mao also discloses the user terminal is an. IPv6 terminal (e.g., page 6), wherein the service equipment is an authentication server for executing authentication of a created IP

address of the user terminal (e.g., page 6), wherein the packet monitoring unit monitors packets containing IP addresses authenticated by the service equipment, wherein the service control unit determines a function for releasing access regulation such that the packets having the IP addresses as the source addresses are passed, based on the packets monitored by the packet monitoring unit (e.g., page 6), wherein the external equipment control unit controls the network equipment so as to execute the function for releasing the access regulation (e.g., page 6).

72. Referring to claim 6, Mao discloses the claimed limitations as rejected above. Mao also discloses an address transmission unit for creating an IP address of the user terminal and transmitting it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., page 6).

73. Referring to claim 7, Mao discloses the claimed limitations as rejected above. Mao also discloses wherein the functions determined by the service control unit include a function for recording predetermined information (e.g., page 6).

74. Referring to claim 8, Mao discloses the claimed limitations as rejected above. Mao also discloses wherein the functions determined by the service control unit include a function for transmitting messages to a predetermined network equipment or the service equipment (e.g., page 6).

75. Referring to claim 9, Mao discloses the claimed limitations as rejected above. Mao also discloses a program for causing a computer to execute the steps of: monitoring packets interchanged between a user terminal and service equipment providing predetermined services to the user terminal (e.g., page 4); and determining and executing functions for complementing or expanding the functions of the service equipment based on the monitored packets, in lieu of the service equipment (e.g., page 5).

76. Referring to claim 10, Mao discloses the claimed limitations as rejected above. Mao also discloses a program for causing a computer for executing functions complementing or expanding functions of service equipment as a substitute for the service equipment by controlling network equipment transferring packets interchanged between a user terminal (e.g., page 3), and the service equipment, arranged between the user terminal and the service equipment providing predetermined services to the user terminal, to execute the steps of: monitoring packets interchanged between the user terminal and the service equipment (e.g., page 4); determining the functions for complementing or expanding based on the monitored packets and controlling the network equipment based on the determined functions (e.g., page 4).

77. Referring to claim 11, Mao discloses the claimed limitations as rejected above. Mao also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., page 4); and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment and executing functions complementing or

expanding the functions of the service equipment based on the packets meeting predetermined conditions (e.g., page 5).

78. Referring to claim 12, Mao discloses the claimed limitations as rejected above. Mao also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., page 5).

79. Referring to claim 13, Mao discloses the claimed limitations as rejected above. Mao also discloses a network system comprising: service equipment for communicating with a user terminal and providing predetermined services to the user terminal (e.g., page 6); network equipment arranged between the user terminal and the service equipment (e.g., page 6), for transferring packets interchanged between the user terminal and the service equipment; and a proxy network control apparatus for monitoring packets interchanged between the user terminal and the service equipment and for executing functions complementing or expanding the functions of the service equipment as a substitute for the service equipment by controlling the network equipment based on the packets meeting predetermined conditions (e.g., page 6).

80. Referring to claim 14, Mao discloses the claimed limitations as rejected above. Mao also discloses wherein the proxy network control apparatus is integrated in the service equipment (e.g., page 3).

81. Referring to claim 15, Mao discloses the claimed limitations as rejected above. Mao also discloses wherein the service equipment is a DHCP server (e.g., page 6), wherein the proxy network control apparatus monitors packets containing an address distributed to the user terminal from the service equipment and controls the network equipment so as to allow the packets transmitted from the user terminal and having the address as the source address to pass and so as not to allow other packets to pass (e.g., page 6).

82. Referring to claim 16, Mao discloses the claimed limitations as rejected above. Mao also discloses the user terminal is a mobile communication terminal having a home address of a home network (e.g., page 6), wherein the network equipment is network equipment allowing the packets having a predetermined source address to pass and not allowing other packets to pass among the packets transmitted from an external network of the home network to the exterior (e.g., page 6), and wherein the proxy network control apparatus controls the -network equipment so as to pass the packets containing the home address of the user terminal as the source address, based on the packets containing the home address of the user terminal interchanged between the user terminal moved into the external network and a home agent of the home network (e.g., page 6).

83. Referring to claim 17, Mao discloses the claimed limitations as rejected above. Mao also discloses the user terminal is an IPv6 terminal (e.g., page 6), wherein the service equipment is an authentication server for authenticating created IP address of the user terminal (e.g., page 6), wherein the proxy network unit controls the network

equipment so as to allow the packets having the IP address authenticated by the service equipment as the source address to pass (e.g., page 6).

84. Referring to claim 18, Mao discloses the claimed limitations as rejected above. Mao also discloses wherein the proxy network control apparatus further executes a function for creating the IP address of the user terminal and sending it to the user terminal, or for transmitting a network prefix to the user terminal (e.g., page 6).

Conclusion

In order to expedite the prosecution of this case, multiple references are used for the rejections to demonstrate that several references disclose the claimed subject matter of the claims.

Examiner has cited particular columns and line numbers and/or paragraphs and/or sections and/or page numbers in the reference(s) as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety, as potentially teaching, all or part of the claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973.

The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Haresh N. Patel/

Primary Examiner, Art Unit 2154

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